			ASSIMÉ	ASSIMÉTRICAS					
INSTANCIA	NAIVE-BRUNO	NAIVE-FELIPE	EXATO** M-SA (Felipe)			ACS (I	ACS (Bruno)		
				Custo	TEMPO(s)	Custo	TEMPO(s)	Custo	TEMPO(s)
INST-A-10-3	823	574.417	431.583	660	3.16	676.833	0.513	687.083	0.133
INST-A-10-4	959.25	1042.33	467.6	784.25	4.24	601.083	0.866	523.567	0.184
INST-A-10-5	934.5	965.7	638,08	486.9	13.73	456.833	1.219	456.833	0.382
INST-A-20-3	901,167	1740.83	5515	722.5	12.81	655.667	3.177	577.167	0.689
INST-A-20-4	955	1812.83	5941	658.417	15.20	450.717	2.921	725.083	0.574
INST-A-20-5	641,467	1107.85		484.833	22.41	523.9	4.056	416.167	0.743
INST-A-30-3	1435	2308.67		1034.33	18.33	924.75	5.975	1049.33	0.847
INST-A-30-4	844,8	1358.03		632.417	80.36	615.533	13.684	795.817	3.017
INST-A-30-5	1040,5	2073.18	KILL	628.667	43.82	478.233	6.955	480.633	1.57
INST-A-40-3	1255,5	2984.92		1034.17	65.16	1168.92	19.505	1267.17	4.695
INST-A-40-4	1666,67	2764.47	KILL	1183.83	76.90	944.717	20.303	1154	3.796
INST-A-40-5	1122	2640.03	KILL	781.65	109.23	694.55	22.441	664.133	3.897
INST-A-50-3				1955.83	20.80	1453.3	12.487	1630.83	6.772
INST-A-50-4	-			1473.67	73.54	1240.63	28.352	1394.45	7.27
INST-A-50-5	-			1250.9	101.80	890.717	26.124	875.717	4.911
INST-A-100-3				3160.17	401.20	2442.67	36.576	3428.42	28.171
INST-A-100-3	-			3747.42	106.95	2556.43	18.168	3064.42	17.287
NST-A-100-5				3282.83	296.56	1831.63	31.662	1540.75	29.118
INST-A-200-3	-			7153	1052.43	5797.58	125.33	6702.42	58.304
INST-A-200-4				7413.25	683.02	3981.25	101.211	4562.67	91.412
INST-A-200-5				6009	3654.12	2435.22	255.548	3799.58	166.605
NST-A-200-3				17647.5	1047.24	2433.22	233.340	37 99.30	100.003
INST-A-500-4				17463.5	3487.21				
INST-A-500-4				17463.3	9606.95				
11431-74-300-3	-			17009.0	9000.93				
INST-B-10-3	947	1667	729.5	729.5	4.15	772.333	0.474	772.333	0.218
INST-B-10-3	814	658.133	395,6	382.167	8.40	355.317	1.643	387.067	0.389
INST-B-10-5	786.3	821.933	431.3	540.95	14.63	388.9	1.502	489.833	0.44
INST-B-10-3	1177.5	1621.25	5549	922	13.61	948.167	2.833	1143	0.636
INST-B-20-4	1390	2120.5	4504	1053.25	9.61	699.883	3.231	948	0.030
INST-B-20-4	1361	2193.17	3733	1062	11.51	507.883	3.191	698.167	0.514
INST-B-20-3	1551.3	2767.17	8451	1409.67	38.14	1201.67	10.982	1205.08	2.798
INST-B-30-3						1122.3			
INST-B-30-4	1560 1027.17	2644.33 2301.75	6569 KILL	1217.75 965.183	45.90 79.70	768.467	11.265 14.974	1050.9 940.983	2.85
INST-B-40-3	1948 2059.83	3440.75 4231.83	KILL 9583	1843.67 2013	56.89 22.95	1872.33 2337.67	19.531 9.86	1981.5 2568.67	3.882
INST-B-40-5	1983	3253.83	KILL	1622.33	113.14	1220.9	27.138	1573.47	5.383
INST-B-50-3				2286.33	41.04	2503	23.448	2739.33	3.918
INST-B-50-4				2248.08	155.33	1337.25	42.53	1698.5	10.744
INST-B-50-5				2493.83	105.31	1567.82	35.084	1821.88	5.821
NST-B-100-3	-			3470.33	331.59	3497.5	30.38	3780.75	36.668
NST-B-100-4	-			4875.33	719.05	3268.53	48.551	3444.08	44.061
NST-B-100-5	-			4886.5	310.60	2687.33	32.423	4099.18	32.258
NST-B-200-3				9799.5	1030.07	7120.5	130.568	8417.83	91.27
NST-B-200-4				9715	2103.93	4516.47	174.757	4409.77	109.57
NST-B-200-5				9497.33	3941.99	4759.97	255.478	4955.07	139.314
NST-B-500-3				23367.5	8962.21				
NST-B-500-4				-					
NST-B-500-5				-		1	1	1 1	

INSTANCIA NAIVE-BRUNO NAIVE-FELIPE EXATO**	
INST-A-10-3	
INSTA-10-4 971.833 827 460 460 6.43 529.75 0.646 600.25 INSTA-10-5 1018.75 855.9 412.73 435.933 17.78 326.333 1.238 405.717 INSTA-20-3 1226,5 1620.83 6931 871.167 07.06 676.417 1.424 942.5 INSTA-20-4 479.3 889.367 393.6 418.417 26.30 416.583 3.197 374.75 INSTA-20-6 692 1008.78 1890.4 377.833 52.03 309.003 4.673 387.467 INSTA-30-3 1052.5 2528.5	TEMPO(s)
INSTA-10-5 1018.75 855.9 412.73 435.933 17.78 326.333 1.238 405.717 INSTA-20-3 1226.5 1620.83 6931 871.167 07.06 676.417 1.424 94.2 5 INSTA-20-5 692 1008.78 1890.44 377.833 52.03 390.033 4.673 387.467 INSTA-30-5 692 1008.78 1890.44 377.833 52.03 390.033 4.673 387.467 INSTA-30-3 1052.5 2528.5 - 843.667 9.67 699 3.071 871.917 INSTA-30-4 1190.67 2937.08 - 815.917 17.83 664.583 3.579 899.917 INSTA-30-5 1306.5 1336.63 - 679.85 93.67 542.333 9.57 680.433 INSTA-40-4 1328.33 2658.63 KILL 847.917 143.12 716.417 17.848 849.633 INSTA-40-5 1370.67 2340.23 KILL 889.917 122.96 602.283 16.486 614.483 INSTA-40-5 1370.67 2340.23 KILL 889.917 122.96 602.283 16.486 614.483 INSTA-40-5 1311.42 104.87 1188.43 17.604 1194.25 INSTA-40-6 1256.75 325.03 637.367 23.314 749.867 INSTA-40-6 3081.33 436.69 1657.03 38.823 1707.42 INSTA-400-6 7432.33 607.47 3289.25 99.498 3250.75 INSTA-400-6 7432.33 607.47 3289.25 99.498 3250.75 INSTA-400-6 16984.3 13166.58 7961.83 1984.9 12482.9 INSTA-500-3 7432.33 607.47 3289.25 99.498 3250.75 INSTA-500-3 16984.3 13166.58 7961.83 1984.9 12482.9 INSTA-500-4 16984.3 13166.58 7961.83 1984.9 12482.9 INSTA-500-5	0.19
INST-A-20-3 1226.5 1620.83 6931 871.167 07.06 676.417 1.424 942.5 INST-A-20-4 479.3 899.967 3936 418.417 26.30 416.583 3.197 374.75 INST-A-20-5 692 1008.78 18904 377.833 52.03 309.033 4.673 387.467 INST-A-30-3 1052.5 2528.5	0.376
INST-A-20-4 479,3 899.367 3936 418.417 26.30 416.583 3.197 374.75 INST-A-20-6 692 1008.78 18904 377.833 52.03 309.033 4.673 387.467 INST-A-30-1 1052,5 2528.5 843.667 9.67 699 3.071 871.917 INST-A-30-4 1190.67 2937.08 815.917 17.83 654.583 3.579 899.917 INST-A-30-5 1306,5 1935.63 679.85 93.67 542.333 9.57 6809.433 INST-A-40-3 1591,17 3727.17 1289.83 25.26 1243.17 6.696 1544.17 INST-A-40-4 1328.33 2658.63 KILL 847.917 143.12 716.417 17.848 849.633 INST-A-40-5 1370.67 2340.23 KILL 893.917 122.96 602.283 16.486 614.483 INST-A-50-3 1556.33 43.97 1601.42 10.668 1749.17 INST-A-50-4 111.42 10.487 1188.43 17.604 1194.25 INST-A-100-3 1267.5 325.03 637.367 23.314 749.867 INST-A-100-3	0.707
INST-A-20-5 692 1008.78 18904 377.833 52.03 309.033 4.673 387.467 INST-A-30-3 1052.5 2262.5 843.667 9.67 669 3.071 871.917 INST-A-30-3 1190.5 2937.08 815.917 17.83 664.583 3.579 899.917 INST-A-30-5 1306.5 1935.63 679.85 93.67 542.333 9.57 680.433 INST-A-40-3 1591.17 3727.17 1289.83 25.26 1243.17 6.696 1544.47 INST-A-40-5 1327.067 2340.23 KILL 847.917 143.12 716.417 17.848 849.633 INST-A-40-5 1370.67 2340.23 KILL 893.917 122.96 602.283 16.486 614.483 INST-A-60-3 1556.33 43.97 1601.42 10.668 1749.17 INST-A-50-5 1311.42 104.87 1188.43 17.604 1194.25 INST-A-60-5 1311.42 104.87 1188.43 17.604 1194.25 INST-A-60-5 3081.33 436.69 1657.03 38.823 1707.42 INST-A-100-3 3081.33 436.69 1657.03 38.823 1707.42 INST-A-100-5 3081.33 436.69 1657.03 38.823 1707.42 INST-A-200-3	0.536
INST.A-30-3 1052.5 2528.5	1.144
INST-A-30-4 1190.67 2937.08 815.917 17.83 654.583 3.579 899.917 INST-A-30-5 1306.5 1935.63 679.85 93.67 542.333 9.57 660.433 INST-A-40-4 1328.33 2658.63 KILL 847.917 143.12 716.417 17.848 849.633 INST-A-40-5 1370.67 2340.23 KILL 847.917 143.12 716.417 17.848 849.633 INST-A-40-5 1370.67 2340.23 KILL 893.917 122.96 602.283 16.486 614.483 INST-A-50-3 1556.33 43.37 1601.42 10.686 1749.17 INST-A-50-4 1311.42 104.87 1188.43 17.604 1194.25 INST-A-50-5 1256.75 325.03 637.367 23.314 749.867 INST-A-100-3 3081.33 436.69 1657.03 38.823 1707.42 INST-A-100-4 2756.63 693.29 1375.8 49.871 1400.23 INST-A-200-5 6632.5 1753.61 2889.3 174.408 2572.02 INST-A-200-5 7452.33 607.47 3289.25 99.498 3250.75 INST-A-500-5 7545.17 466.90 2680.43 872.29 2591.93 INST-A-500-5 16984.3 3166.58 7961.83 1984.9 12482.9 INST-A-500-5 7545.17 466.90 2680.43 872.29 2591.93 INST-A-500-5 16984.3 3166.58 7961.83 1984.9 12482.9 INST-A-500-5 1898.25 1382.55 1898.3 174.408 2572.02 INST-A-500-5	1.785
INST-A-03-5 1306,5 1935,63 679,85 93,67 542,333 9,57 680,433 INST-A-40-3 1591,17 3727,17 1289,83 25,26 1243,17 6,696 1544,17 INST-A-40-4 132,8,33 2658,63 KILL 847,917 143,12 716,417 17,848 849,633 INST-A-40-5 1370,67 2240,23 KILL 847,917 143,12 716,417 17,848 849,633 INST-A-40-5 1370,67 2240,23 KILL 847,917 143,12 716,417 17,848 849,633 INST-A-40-5 1370,67 2240,23 KILL 847,917 143,12 716,417 17,848 849,633 INST-A-50-3 1556,33 43,97 1601,42 10,668 1749,17 INST-A-50-4 1256,75 325,03 637,367 23,314 749,867 INST-A-50-5 1266,75 325,03 637,367 23,314 749,867 INST-A-100-3 3197,5 168,14 2043,75 26,243 2169,67 INST-A-100-4 2756,63 693,29 1375,8 49,871 1400,23 INST-A-200-3 7432,33 607,47 3289,25 99,498 3250,75 INST-A-200-3 7432,33 607,47 3289,25 99,498 3250,75 INST-A-200-6 7545,17 466,90 2680,43 87,229 2591,93 INST-A-500-5 7545,17 466,90 2680,43 87,229 2591,93 INST-A-500-5 16964,3 13166,58 7961,83 1984,9 12482,9 INST-B-10-3 1105 1819 834,667 929,167 04,04 972 0.381 927 INST-B-10-4 978,25 1382,25 578,73 599,833 11,97 470,817 0.978 404,5 INST-B-10-5 1208,5 1440,17 748,35 861,9 7.71 657,8 0.644 731,25 INST-B-20-4 1452 1895,15 96,833 19,68 886,1 2,641 1426,83 INST-B-20-5 1155,5 1376,13 739,967 2247 441,05 2,816 621,533 INST-B-30-4 1447,83 8194 1054,83 25,43 1403,83 4,591 1356,67 INST-B-30-4 1447,83 8194 1054,83 25,43 1403,83 4,591 1366,67 INST-B-30-4 1417,17 3361,33 1187,5 1312 51,93 1207,08 12,445 1274,17 INST-B-40-4 1810 4147,83 KILL 1197,83 7541 84,197 11,553 849 INST-B-40-3 1417,17 3361,33 I1887,5 1312 51,93 1207,	1.703
INST-A-40-3 1591,17 3727.17 1289.83 25.26 1243.17 6.696 1544.17 INST-A-40-4 1328,33 2658.63 KILL 847,917 143.12 716.417 17.848 849.633 INST-A-40-5 1370,67 2340.23 KILL 893.917 122.96 602.283 16.486 614.483 INST-A-50-3 1556.33 43.97 1601.42 10.668 1749.17 INST-A-50-4 1311.42 104.87 1188.43 17.604 1194.25 INST-A-50-5 3197.5 168.14 2043.75 26.243 2169.67 INST-A-100-3 3081.33 436.69 1657.03 38.823 1707.42 INST-A-100-4 3081.33 436.69 1657.03 38.823 1707.42 INST-A-100-5 7432.33 607.47 3289.25 99.498 3250.75 INST-A-200-4 6632.5 1753.61 2889.3 174.408 2572.02 INST-A-200-5 7545.17 466.90 2680.43 87.229 2591.93 INST-A-500-5 16964.3 13166.58 7961.83 1984.9 12482.9 INST-B-10-6 1208.5 1440.17 748.35 861.9 7.71 657.8 0.644 731.25 INST-B-20-3 1313 2177.67 1946 960.333 0.908 1253 1.661 1077.83 INST-B-20-4 1452 1895.15 968.833 19.68 886.1 2.641 1426.83 INST-B-20-5 1153.5 1876.13 738.967 22.47 441.05 2.816 621.533 INST-B-30-3 1438 3124.67 8194 1054.83 25.43 1400.83 4.591 1356.67 INST-B-30-5 1438 3124.67 8194 1054.83 25.43 1400.83 4.591 1356.67 INST-B-30-5 1438 3124.67 8194 1054.83 25.43 1400.83 4.591 1356.67 INST-B-30-5 1438 3124.67 8194 1054.83 25.43 1400.83 4.591 1356.67 INST-B-30-5 1438 3124.67 8194 1054.83 25.43 1400.83 4.591 1356.67 INST-B-30-5 1438 3124.67 8194 1054.83 25.43 1400.83 4.591 1356.67 INST-B-30-5 879.75 2211.72 789.93 113.59 515.783 9.654 585.783 INST-B-30-5 879.75 2211.72 789.93 113.59 515.783 9.654 585.783 INST-B-30-5 879.75 2211.72 789.93 113.59 515.783 9.654 585.783 INST-B-30-3 1417.17 3361.33 11887.	2.651
INST-A-40-4 1328,33 2658.63 KILL 847.917 143.12 716.417 17.848 849.633 INST-A-40-5 1370,67 2340,23 KILL 893.917 122.96 602.283 16.486 614.483 INST-A-50-3 1556.33 43.97 1601.42 10.668 1749.17 INST-A-50-4 1311.42 104.87 1188.43 17.604 1194.25 INST-A-50-5 1256.75 325.03 637.367 23.314 749.867 INST-A-100-3 3191.5 168.14 2043.75 26.243 2169.67 INST-A-100-4 3081.33 436.69 1657.03 38.823 1707.42 INST-A-100-5 2756.63 693.29 1375.8 49.871 1400.23 INST-A-200-3 7432.33 607.47 3289.25 99.498 3250.75 INST-A-200-4 7545.17 466.90 2680.43 87.229 2591.93 INST-A-500-4 16964.3 13166.58 7961.83 1984.9 12482.9 INST-A-500-5 -	6.374
INST-A-40-5	6.147
INST-A-50-3	18.018
INST-A-50-4	16.604
INST-A-50-5	11.828
INST-A-100-3	17.023
INST-A-100-3	35.628
INST-A-100-4	19.374
INST-A-200-3	24.136
INST-A-200-4	39.422
INST-A-200-4	46.626
INST-A-200-5	43.231
INST-A-500-3	35.046
INST-A-500-4	684.747
INST-A-500-5	
INST-B-10-3	
INST-B-10-4 978.25 1382.25 578.73 599.833 11.97 470.817 0.978 404.5 INST-B-10-5 1208.5 1440.17 748.35 861.9 7.71 657.8 0.644 731.25 INST-B-20-4 1452 1895.15 968.833 19.68 886.1 2.641 1426.83 INST-B-20-5 1153.5 1876.13 738.967 22.47 441.05 2.816 621.533 INST-B-30-3 1438 3124.67 8194 1054.83 254.3 1403.83 4.591 1356.67 INST-B-30-5 879.75 2211.72 789.933 113.59 515.783 9.654 585.783 INST-B-40-3 1417.17 3361.33 11887.5 1312 51.93 1207.08 12.445 1274.17 INST-B-40-5 1559.33 3448.95 KILL 1197.83 75.41 841.917 11.553 849 INST-B-50-3 1724.33 115.03 1308.75 9.619 1205.33 INST-B-50-3 1724.33 115.03 1308.75 9.619 1205.33 INST-B-50-3 1724.33 115.03 1308.75 9.619 1205.33	
INST-B-10-4 978.25 1382.25 578.73 599.833 11.97 470.817 0.978 404.5 INST-B-10-5 1208.5 1440.17 748.35 861.9 7.71 657.8 0.644 731.25 INST-B-20-3 1313 2177.67 1946 960.333 09.08 1253 1.681 1077.83 INST-B-20-4 1452 1895.15 968.833 19.68 886.1 2.641 1426.83 INST-B-20-5 1153.5 1876.13 738.967 22.47 441.05 2.816 621.533 INST-B-30-0 1438 3124.67 8194 1054.83 25.43 1403.83 4.591 1356.67 INST-B-30-5 879.75 2211.72 789.933 113.59 515.783 9.654 585.783 INST-B-40-3 1417.17 3361.33 11887.5 1312 51.93 1207.08 12.445 1274.17 INST-B-40-5 1559.33 3448.95 KILL 1197.83 75.41 841.917 11.553 849 INST-B-50-3 1724.33 115.03 1308.75 9.619 1205.33 INST-B-50-3 1724.33 115.03 1308.75 9.619 1205.33 INST-B-50-3 1724.33 115.03 1308.75 9.619 1205.33 INST-B-50-5 1559.33 1449.85 KILL 1084 96.15 671.817 41.646 699.283 185.55 1205.23 1205.	0.192
INST-B-10-5 1208.5 1440.17 748.35 861.9 7.71 657.8 0.644 731.25 INST-B-20-3 1313 2177.67 1946 960.333 09.08 1253 1.681 1077.83 INST-B-20-4 1452 1895.15 968.833 19.68 886.1 2.641 1426.83 INST-B-20-5 1153.5 1876.13 738.967 22.47 441.05 2.816 621.533 INST-B-30-3 1438 3124.67 8194 1054.83 25.43 1403.83 4.591 1356.67 INST-B-30-5 879.75 2211.72 789.933 113.59 515.783 9.654 585.783 INST-B-40-3 1417.17 3361.33 11887.5 1312 51.93 1207.08 12.445 1274.17 INST-B-40-4 1810 4147.83 KILL 1197.83 75.41 841.917 11.553 849 INST-B-50-3 1724.33 115.03 1308.75 9.619 1205.33 INST-B-50-3 1724.33 115.03 1308.75 9.619 1205.33 INST-B-50-3 1724.33 115.03 1308.75 9.619 1205.33	0.152
INST-B-20-3 1313 2177.67 1946 960.333 09.08 1253 1.681 1077.83 INST-B-20-4 1452 1895.15 968.833 19.68 886.1 2.641 1426.83 INST-B-20-5 1153.5 1876.13 738.967 22.47 441.05 2.816 621.533 INST-B-30-3 1438 3124.67 8194 1054.83 25.43 1403.83 4.591 1356.67 INST-B-30-4 1184 2358.75 8603 1040.17 33.58 504.9 5.046 562.15 INST-B-30-5 879.75 2211.72 789.933 113.59 515.783 9.654 585.783 INST-B-40-3 1417.17 3361.33 11887.5 1312 51.93 1207.08 12.445 1274.17 INST-B-40-4 1810 4147.83 KILL 1197.83 75.41 841.917 11.553 849 INST-B-40-5 1559.33 3448.95 KILL 1084 96.15 671.817 14.646 699.283 INST-B-50-3 1724.33 115.03 1308.75 9.619 1205.33	0.431
INST-B-20-4	0.993
INST-B-20-5 1153,5 1876.13	0.789
INST-B-30-3	1.564
INST-B-30-4 1184 2358.75 8603 1040.17 33.58 504.9 5.046 562.15 INST-B-30-5 879,75 2211.72 - 789.933 113.59 515.783 9.654 585.783 INST-B-40-3 1417,17 3361.33 11887.5 1312 51.93 1207.08 12.445 1274.17 INST-B-40-4 1810 4147.83 KILL 1197.83 75.41 841.917 11.553 849 INST-B-40-5 1559,33 3448.95 KILL 1084 96.15 671.817 14.646 699.283 INST-B-50-3 1724.33 115.03 1308.75 9.619 1205.33	3.564
INST-B-30-5 879,75 2211.72 789,933 113.59 515.783 9.654 585.783 INST-B-40-3 1417,17 3361.33 11887.5 1312 51.93 1207.08 12.445 1274.17 INST-B-40-4 1810 4147.83 KILL 1197.83 75.41 841.917 11.553 849 INST-B-40-5 1559,33 3448.95 KILL 1084 96.15 677.817 14.646 699,283 INST-B-50-3 1724.33 115.03 1308.75 9.619 1205.33	2.87
INST-B-40-3	
INST-B-40-4 1810 4147.83 KILL 1197.83 75.41 841.917 11.553 849 INST-B-40-5 1559,33 3448.95 KILL 1084 96.15 671.817 14.646 699.283 INST-B-50-3 1724.33 115.03 1308.75 9.619 1205.33	5.645
INST-B-40-5 1559,33 3448.95 KILL 1084 96.15 671.817 14.646 699.283 INST-B-50-3 1724.33 115.03 1308.75 9.619 1205.33	8.874 10.53
INST-B-50-3 1724.33 115.03 1308.75 9.619 1205.33	
	15.124
	19.09
INST-B-50-4 1611.33 163.83 864.5 12.485 1018.25	22.785
INST-B-50-5 1483.58 137.06 793.217 12.007 768.633	24.173
INST-B-100-3 4208.67 105.85 1898.58 22.664 1845.42	11.496
INST-B-100-4 4301.5 78.62 3815.5 17.071 4841.83	11.085
INST-B-100-5 3247.37 1315.21 1510.75 75.691 1447.5	53.849
INST-B-200-3 7606 675.84 3078.58 140.269 5873.58	71.11
INST-B-200-4 7145.83 1935.73 2906.75 219.635 3490.2	99.533
INST-B-200-5 6833 2796.48 2470.15 267.345 3015.63	106.269
INST-B-500-3 7673.08 2027.72 12615	290.084
INST-B-500-4	
INST-B-500-5	